Environmental Action UPDATE

A Quarterly Newsletter About Environmental Activities at McClellan, California March 2002

Community Interviews Play Key Role in Cleanup Efforts

Environmental contamination is not always obvious. If you look closely, you might see stained soil or notice oily water from a recent spill. Contamination that occurred long ago is not always easy to locate. Though contaminated areas are occasionally discovered through record searches, the recollections of former employees are valuable resources in locating areas that need to be investigated.

The Air Force has conducted over 700 employee and community interviews for McClellan. Interviewees included an Air Force truck driver who disposed of waste liquid in pits on the west side of the base in the 1960s. Another McClellan employee observed pits on fire after they were filled with spent solvents and oils. This historical information helped Air Force officials identify disposal pits. Interviews are continuing today.

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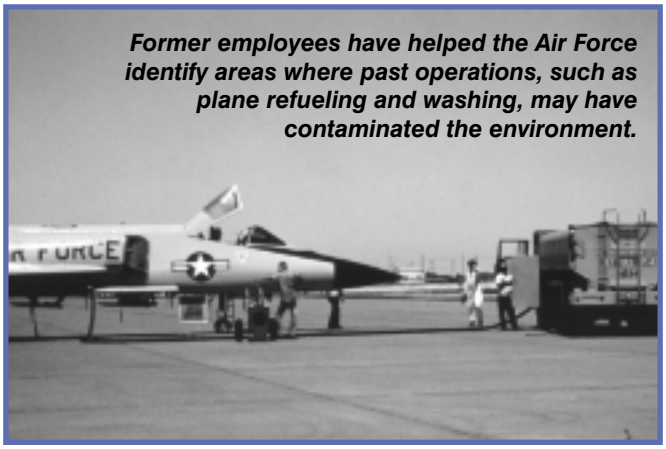


Former employees have helped the Air Force identify areas where past operations, such as plane refueling and washing, may have contaminated the environment.

If you or someone you know has information that may assist the Air Force in its cleanup efforts, or if you want more information about topics in this newsletter, you are urged to contact Roxanne Yonn at (916) 643-1742, Extension 232.

Hexavalent Chromium Levels Cause Temporary Rerouting of Treated Water

In late January, the McClellan Groundwater Treatment Plant (GWTP) was temporarily turned off and the plant's discharge rerouted to the County sanitary sewer system. The GWTP usually discharges treated water to Magpie Creek. Each month, the Air Force monitors water leaving the plant to be sure it meets the State of California's surface water discharge requirements. Rerouting discharge to the sewer system was necessary because hexavalent chromium had been detected in the treated water at levels near and slightly above the limit set by the State.

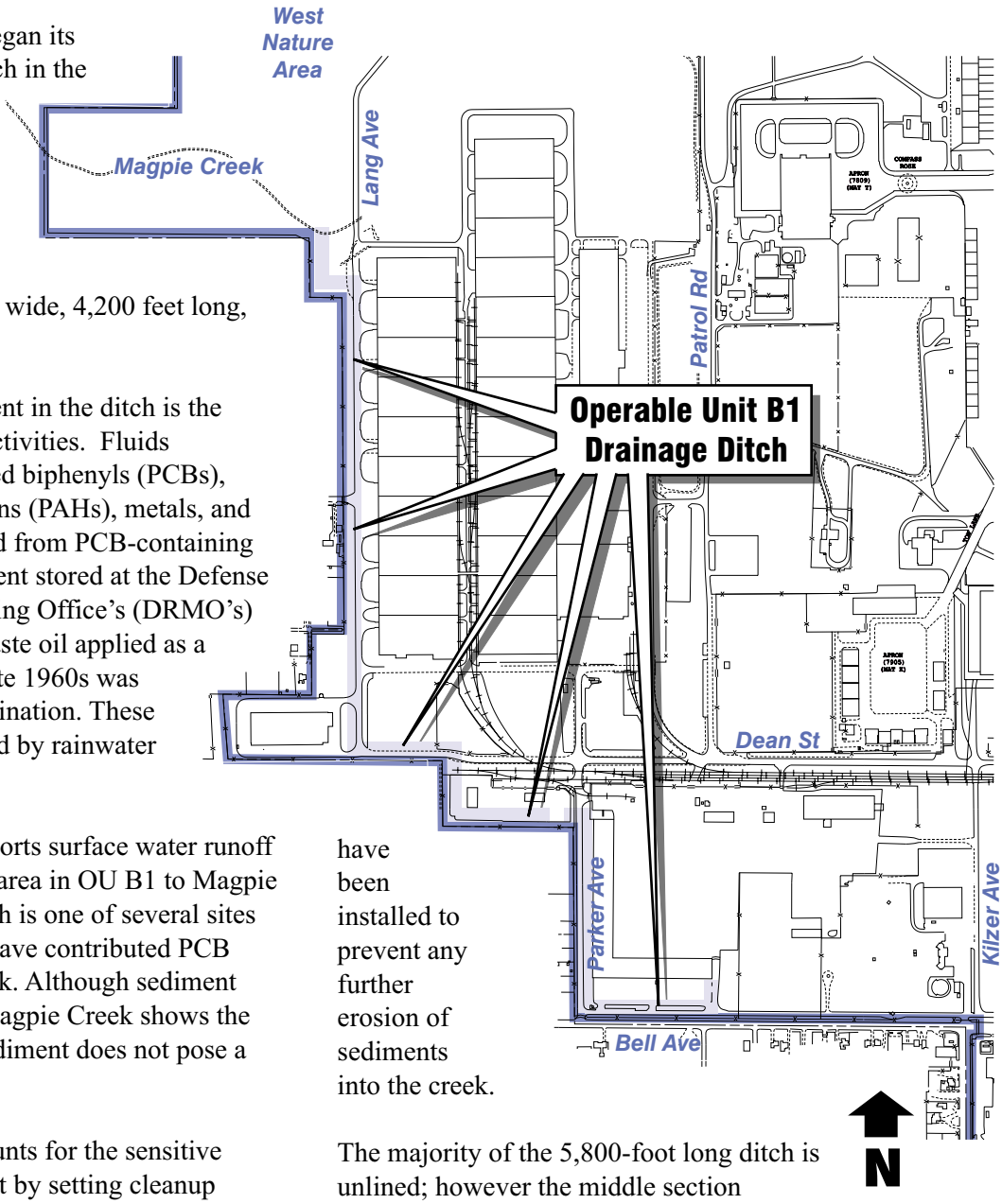
The State's hexavalent chromium limit for discharge to surface water is a monthly average of 10 parts per billion (ppb). The GWTP's monthly average discharge into Magpie Creek in January was slightly above the limit: 10.4 ppb. This concentration is, however, within the limit for discharge to the County's sanitary sewer system.

The Air Force, with regulatory agency approval, turned off 15 of the 56 wells that extract contaminated groundwater, bringing the hexavalent chromium levels back down to within the State's discharge limit. By February 20th, discharge of treated water to Magpie Creek had resumed. Adjustments to the program are being monitored to determine the movement of groundwater contamination.

The Air Force and state and federal regulatory agencies are working together to identify the source of the elevated hexavalent chromium levels. Routine sampling will continue to ensure the health and safety of the public. ■

Excavation at the OU B1 Drainage Ditch

Last fall, the Air Force began its cleanup of a drainage ditch in the southwest portion of the former base in an area called Operable Unit B1 (OU B1). To date, 2,500 cubic yards of soil have been removed. This equates to an area 10 feet wide, 4,200 feet long, and 1.5 feet deep.



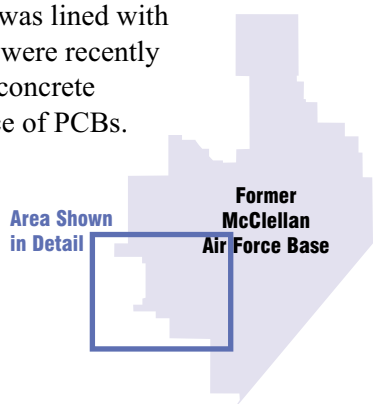
The contaminated sediment in the ditch is the result of past industrial activities. Fluids containing polychlorinated biphenyls (PCBs), polyaromatic hydrocarbons (PAHs), metals, and dioxin/furans were spilled from PCB-containing transformers and equipment stored at the Defense Reutilization and Marketing Office's (DRMO's) unpaved storage area. Waste oil applied as a dust suppressant in the late 1960s was another source of contamination. These contaminants were carried by rainwater runoff into the ditch.

The drainage ditch transports surface water runoff from the DRMO storage area in OU B1 to Magpie Creek. The drainage ditch is one of several sites at McClellan that could have contributed PCB contamination to the creek. Although sediment sampling conducted in Magpie Creek shows the presence of PCBs, the sediment does not pose a threat to human health.

"The cleanup effort accounts for the sensitive nature of the creek habitat by setting cleanup goals that protect both humans as well as potential ecological receptors," says Steve Mayer, Air Force Base Conversion Agency Soils Remediation Program Manager. The cleanup goals are 1) no detection of PCBs or PAHs in sediments, 2) concentrations of metals must be at or below the levels found in surrounding areas, and 3) levels of dioxins and furans must be below levels shown to cause adverse ecological effects.

Mayer further states that, "remediation activities to date have already reduced contaminant levels in the ditch by greater than 97%." Sediment traps have been installed to prevent any further erosion of sediments into the creek.

The majority of the 5,800-foot long ditch is unlined; however the middle section (approximately 1,600 feet) was lined with concrete in 1981. Samples were recently collected from beneath the concrete liner to look for the presence of PCBs. To date, only trace amounts of PCBs have been found under the liner. The Air Force is working with regulators to determine what cleanup actions, if any, are required in this section of the ditch.



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Additional sampling is planned in the unlined portions of the ditch to determine how much deeper the excavation must go to achieve the cleanup goals. The removal effort is currently on hold due to wet weather. Once the winter rains subside, the excavation activity will resume until the cleanup goals are achieved. The project is expected to be completed in late spring 2002. After the removal of the soil, the entire ditch will be restored for proper drainage, and a final report will be issued to document the cleanup level achieved.

The removed soil and sediments are being stored temporarily at the Soils Staging Pile Facility on base, but will ultimately go to a Class II landfill facility off base.

For more information on this removal action, please refer to the following document: ***Work Plan for Interim Remedial Action at OU B1 Drainage Ditch, October 2001, Final.*** Kleinfelder, Inc. and R.F. Weston, Inc. See back page for the location of the Information Repository where you can view the McClellan ■

PCB-contaminated sediments are removed from a drainage ditch, preventing contaminant migration to Magpie Creek and potential adverse ecological impacts

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Community Interviews Play Key Role in Cleanup Efforts (Cont.)

The Air Force has actively sought out potential interviewees. News releases, articles, and fact sheets from the early 1980s to the present have requested people with information to contact the Air Force or state or federal regulatory agencies. Interview efforts in 1979-1981 led to identifying 30 contaminated sites at McClellan. Due to ongoing interviews, extensive site research, and field sampling, 318 Installation Restoration Program (IRP) sites have been found to date.

In July 1995, Air Force officials advertised to local newspapers that they were looking for information from current and former base employees. The outreach effort led to the identification of areas where aircraft flown through nuclear fallout had been washed on base. In 1998, a letter was sent to all base employees with more than 20 years of service at McClellan, asking for any information that could aid in the cleanup effort. Upon base closure, the same request was made of those who left McClellan in the 1998 mass checkouts.

Community interview information has been documented in IRP reports, the Community Relations Plan, and other interview summary reports. In 2001, all McClellan interview information was consolidated, reviewed, and entered into a database, which helped to identify potential issues that required additional follow-up by the Air Force. For instance, interview information regarding the historical use and disposal of mercury in Buildings 368 and 640 prompted further investigation and cleanup at these buildings.

The Air Force's efforts to collect historical information is ongoing. Currently, former employees of McClellan's Technical Operations Division are being interviewed to collect information on potential past radiological activities. The Air Force continues to advertise in newsletters and at public meetings to encourage individuals to talk about historical activities. ■

FIELD UPDATES

Digging Begins at CS 10 Disposal Site

Workers in protective gear collect excavation soil samples from a front-end loader bucket for laboratory analysis, while a CS 10 worker uses water spray for dust control as excavation of the top layer of soil continues.

Soil excavation began in January 2002 at the Confirmed Site (CS) 10 radiological site in the northwestern portion of McClellan. The area to be excavated has been separated into 30-foot by 30-foot grid cells. This grid layout was chosen as the best design for use of the radiological detection equipment and keeping track of the waste. The excavation process includes removing 12-inch layers of soil from each grid cell and placing it into a container. The 12-inch depth was chosen to minimize the risk of impacting drums or other items uncovered during the excavation. Thereafter a second 12-inch layer, and so on, until all waste is removed.

Workers in the drum inventory tent carefully sift through the contents of an unearthed drum. Items found so far in the drums include laboratory glassware such as jars, bottles, and test tubes.

As each bucket of soil is removed, it is scanned for radioactivity, and soil samples are collected for laboratory analysis.

Drum Inventory at CS 10

All of the 110 drums originally recovered have been processed. Most of the drums contained beakers, test tubes, flasks, and other laboratory equipment. Four of the drums had some glassware and resin lab columns that contained residual amounts of americium, plutonium, activated silver, and europium, but nothing at the levels found during the discovery of the vials of plutonium in 2000. ■

Groundwater Remediation

Planning is underway for Phase III of McClellan's groundwater cleanup. To date, wells have been installed to pump contaminated groundwater to a treatment system. The goal has been to pump groundwater from areas where there was a potential for contaminated groundwater to move off base, and from areas with the highest levels of contamination. Quarterly monitoring shows that this goal is being achieved. There are still some areas of contamination on base that are not currently being captured by existing extraction wells. These areas will be addressed in the upcoming Phase III effort. ■

Soil Vapor Extraction

Soil vapor extraction (SVE) is the main process used to clean volatile organic compound (VOC) contamination from the soil below the ground surface but above the groundwater table (called the vadose zone). VOCs in the vadose zone at McClellan are the result of past disposal practices, spills, and leaks of solvents or fuels. In the SVE process, a vacuum is applied to SVE wells and the VOCs are pulled from the subsurface into aboveground treatment units that remove or destroy 99% of the contamination. Cleanup progress is monitored by measuring the VOC concentrations in the soil vapor extraction wells and in soil vapor monitoring wells installed at various distances from the extraction wells.

Five new SVE removal actions began in 2001, bringing to 23 the number of areas across McClellan where SVE units have been operated. Over 50,000 pounds of VOCs were removed by SVE during 2001.

The VOC cleanup of soil vapor is nearly complete at several sites, where removal rates have trailed off to a fraction of a pound removed per day. These sites are being evaluated for permanent shutdown using a process developed jointly by the regulatory agencies and Air Force personnel called a STOP (SVE Termination) evaluation. The STOP evaluation is a step-by-step analysis to ensure that the SVE removal action was successful and can be terminated. ■

RAB UPDATES

RAB Education Seminar

McClellan AFBCA began a training series designed to help the McClellan Restoration Advisory Board (RAB) members better understand the technical aspects of the cleanup program. At the first seminar in January 2002, RAB members learned about the nature of groundwater and its movement and condition beneath McClellan. This information will help RAB members as they review the groundwater quarterly monitoring reports. The quarterly reports track the progress of the groundwater cleanup efforts and list test results from more than 300 wells located on and off base. RAB members examined maps that show how the extent of groundwater contamination is being reduced by extraction wells.

Community RAB member Lola Warrick said of the training, “Fantastic! It was interesting having the scientists themselves explaining what they are doing. They explained things very thoroughly.” ■

Environmental Management Remedial Scoreboard

As of January 2002:

1,067,430

Pounds of volatile organic compound contamination removed from soil and groundwater.

Environmental Action
UPDATE
March 2002

The ***Environmental Action Update*** is a publication of the Air Force Base Conversion Agency (AFBCA) at McClellan, California, designed to keep the public informed of environmental activities at the base. For questions, comments, or to be added to the mailing list, please write to AFBCA/DD-McClellan, 3411 Olson Street, McClellan, CA 95652-1071 or phone (916) 643-1742 ext. 232.

www.afbca.hq.af.mil/mcclellanem/

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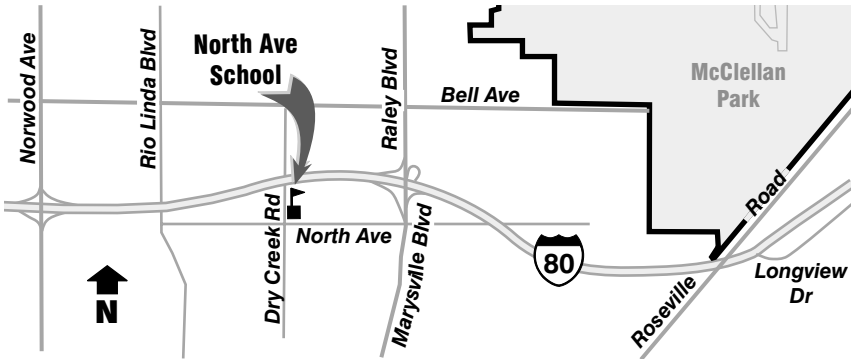
Public Posterboard Session and Restoration Advisory Board Meeting

Wednesday March 20, 2002

North Ave Elementary School
1281 North Ave, Del Paso Heights



Posterboard Session - 5:30 - 6:30 p.m.

Talk to the McClellan project managers and regulatory agencies involved in the environmental cleanup:

- Learn the status of cleanup projects
- Learn the latest information on McClellan Reuse.

RAB Presentation - 6:30 - 7:30 p.m.
Topic: Privatization of Cleanup Activities

The Air Force and County of Sacramento will present an idea for a single-site pilot privatization cleanup project at McClellan. The County is interested in hearing comments from RAB members and the public.

If you would like more information or need special accommodation for the meeting, please contact Roxanne Yonn at (916) 643-1742, Ext. 232.

The McClellan Information Repository/ Administrative Record

Building 10, First Floor of the West End, 3411 Olson Street, McClellan

8:00 to 3:00 Mon-Thurs – 8:00 to 3:00 Every Other Friday

For Repository questions or special visit needs, please call the librarian, Laraine McQuillen, at (916) 643 1250, Ext. 239.

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